

In re Patent Application of: Yukio Murata



Serial No. 10/057,882                      Examiner: ASFAND M SHEIKH  
Filed: January 29, 2002                      Group Art Unit: 3627  
For: PROGRAM AND METHOD FOR PROVIDING A DELIVERY DATE,  
AND RECORDING MEDIUM THEREOF

TRANSLATOR'S DECLARATION

Honorable Commissioner of Patents & Trademarks  
Washington, D.C. 20231

Sir:

I, Yasuyuki Kurachi, residing at c/o SEIWA PATENT &  
LAW, Toranomom 37 Mori Bldg., 3-5-1, Toranomom Minato-ku, Tokyo  
105-8423, Japan declare the following:

(1) That I know well both the Japanese and English  
languages;

(2) That I translated Japanese Patent Application  
No.2001-024774, filed January 31, 2001, from the Japanese  
language to the English language;

(3) That the attached English translation is a true and  
correct translation of the aforesaid Japanese Patent  
Application No.2001-024774 to the best of my knowledge and  
belief; and

(4) That all statements made of my own knowledge are true  
and that all statements made on information and belief are  
believed to be true, and further that these statements are made  
with the knowledge that willful false statements and the like  
are punishable by fine or imprisonment, or both, under  
18 U.S.C. 1001, and that such false statements may jeopardize  
the validity of the application or any patent issuing thereon.

May 25, 2006

Date

A handwritten signature in black ink, appearing to read "Kurachi Yasuyuki".

Translator Yasuyuki Kurachi

2001-024774 (J394)

[NAME OF DOCUMENT] APPLICATION FOR PATENT

[REFERENCE NUMBER] 0052479

[DATE SUBMITTED] January 31, 2001

[DESTINATION] To Commissioner, Patent Office

[INTERNATIONAL PATENT CLASSIFICATION] G06F 15/00

[TITLE OF THE INVENTION] Program and Method for Delivery  
Date, and Recording Medium  
thereof

[NUMBER OF CLAIMS] 5

[INVENTOR]  
[Address or Residence] c/o FUJITSU LIMITED, 1-1,  
Kamikodanaka 4-chome,  
Nakahara-ku, Kawasaki-shi,  
Kanagawa  
[Name] Yukio Murata

[APPLICANT]  
[Identification Number] 000005223  
[Name of Applicant] FUJITSU LIMITED

[PATENT ATTORNEY]  
[Identification Number] 100089141  
[Patent Attorney]  
[Address or Residence] 21-20-603, Tairamachi  
1-chome, Meguro-ku,  
Tokyo  
[Name of Patent Attorney] Morihiro Okada  
[Phone Number] 03-3725-2215

[INDICATION OF FEES TO BE SUBMITTED]  
[Registration Number for Prepayment] 015543  
[Amount of Fee] 21,000 yen

[LIST OF ARTICLES TO BE SUBMITTED]  
[Name of Article] Specification 1  
[Name of Article] Drawing 1  
[Name of Article] Abstract 1  
[Number of General Authorization] 9705795

[NEED FOR PROOF] Yes



[Document Name] Specification

[Title of Invention] Program and Method for Delivery Date, and  
Recording Medium thereof

[Scope of Claim for Patent]

[Claim 1] A method of providing a delivery date for order-received products to a customer, comprising the steps of:

entering a requirement information of products from the customer;

providing to the customer a shipment guarantee value which is provisionally allocated to a volume of products for a order included in said requirement information;

receiving formal order-receiving information of the products from said customer in response to said shipment guarantee value; and

formally allocating an applicable said shipment guarantee value based on the order included in said formal order-receiving information.

[Claim 2] A method of providing a delivery date, for order-received products to a customer according to claim 1, wherein, in the step of formally allocating, when said provisionally allocated shipment guarantee value exceeds the formally allocated guarantee value, a portion of the excess is used for another formal allocation, and when said provisionally allocated shipment guarantee value falls short in comparison with a formal allocation, a portion of the shortage is allocated to a new formal order-receiving.

[Claim 3] A method of providing a delivery date for order-received products to a customer according to claim 1, wherein, in the step of formally allocating, the shipment guarantee value is deleted on or after a deadline delivery date for said order-receiving which is calculated from said shipment guarantee value.

[Claim 4] A program of providing a delivery date for order-received products to a customer, the program causing a computer to program the steps comprising:

entering requirement information, of products, from the customer;

providing the customer a shipment guarantee value which is provisionally allocated to a volume of products for a order included in said requirement information;

receiving a formal order-receiving information of the products from said customer in response to said shipment guarantee value; and

formally allocating an applicable said shipment guarantee value based on the order included in said formal order-receiving information.

[Claim 5] A computer readable recording medium having recorded therein a program for providing a delivery date for order-received products to a customer, the program causing a computer to program the steps comprising:

entering a requirement information of products from the customer;

providing to the customer a shipment guarantee value which is provisionally allocated to a volume of products for a order included in said requirement information;

receiving formal order-receiving information of the products from said customer in response to said shipment guarantee value; and

formally allocating an applicable said shipment guarantee value based on the order included in said formal order-receiving information.

[Detailed Description of the Invention]

[0001]

[Field of the Invention]

The invention herein presented relates to a method for providing a delivery date for giving a delivery date, to a program for providing a customer a delivery date, and to a recording medium.

[0002]

[PRIOR ART]

In the unit assembling industry, providing a delivery date has been done in a way that the order information is registered in a system at a time when an order from the customer, such as distributor or agency, is received and, subsequently, the delivery date for the order-receiving information is provided.

[0003]

[Problems to Be Solved by the Invention]

When products are produced according to an expected demand the requirement information provided by the customer (information on the expected demand for the products) allows a shorter lead time.

[0004]

The requirement information provided by the customer, however, is one-way information and no delivery date is provided. Under the circumstances, there has been a demand for providing a delivery date in response to the requirement information and an applicable delivery date in response to formal order-receiving information.

[0005]

The present invention solves the above problem. When a formal order is received from a customer, the delivery date allocation for the order is automatically performed in accordance with the guarantee value. The shipment guarantee value for products which have not been ordered is automatically deleted. By providing the customer with a delivery date in response to the requirement information, the service to the customer is improved, and sales activity is promoted.

[0006]

[Means for Solving Problems]

The means for solving problem relating the present invention is described below with reference to Fig. 1.

In Fig. 1, a processing unit 1, according to a program, performs an allocation process and provides a delivery date based on the requirement information and order-receiving information.

[0007]

A customer 21 has a terminal device connected to a network of a customer involved in sales of the products (for example, a delivery agent).

Next, the operation of the terminal device is explained below.

[0008]

When requirement information of products is entered into the processing unit 1 by the customer, the processing unit provides to the customer a delivery date answer (shipment guarantee value) which is provisionally allocated to a volume of products for an order included in the requirement information. When the processing unit receives formal order-receiving information of the products from the customer in response to the shipment guarantee value, the processing unit formally allocates the delivery date answer (shipment guarantee value). On the contrary, the processing unit automatically deletes the shipment guarantee value for products which have not been ordered.

[0009]

In this case, when the provisionally allocated shipment guarantee value exceeds a formally allocated guarantee value, a portion of the excess is used for other formal allocation, and when the provisionally allocated shipment guarantee value falls short in comparison with formal allocation, a portion of the shortage is allocated to a new formal order-receiving.

[0010]

As the shipment guarantee value is deleted on or after a deadline delivery date for the order receiving which is calculated from the shipment guarantee value, products including unnecessary stock can be automatically eliminated from a production plan.

Thus, an improvement in customer service and the promotion of sales activities become possible by providing the customer with a delivery date in response to requirement information.

When a formal order from a customer is received, the delivery date allocation for the order is automatically performed in accordance with the guarantee value. The shipment guarantee value for products which have not been ordered is automatically deleted. By providing the customer with a delivery date in response to the requirement information, the service to the customer is improved, and sales activity is promoted.

[0011]

[Description of the Preferred Embodiments]

Next, a description of the embodiment and processing operation of this invention is given referring to Fig. 1 to Fig. 6.

[0012]

Fig. 1 represents a whole constitution of one embodiment of this invention. In Fig. 1, the processing unit 1, in compliance with the program, performs the allocation process and provides the delivery date based on the information of the requirement and order receiving. The processing unit 1 consists of means 2 to 14 shown in the figure.

[0013]

A requirement information input means 2 is a means for inputting the requirement information of the customer 21 transmitted by the customer via the network. A generating means 3 of provisional order-receiving information is a means for generating provisional order-receiving information from the customer's requirement information (reference can be made to Step 2 in Fig. 2 and (b) in Fig. 4 to be described later).

[0014]

An order-receiving information input means 4 receives the formal order-receiving information of the customer 21 transmitted by the customer 21 via the network. A determination means 5 for canceling provisional order-receiving information is a means for determining whether the provisional order-receiving information, generated from the customer's requirement, is to be canceled or not according to the formal

order-receiving information.

[0015]

A generating means 6 of allocation order-receiving information generates the order-receiving information for allocation based on the information of the provisional order-receiving and the delivery date answer.

A means for totalizing estimated shipment volume 7 totalizes the order receiving information for allocation and generates an estimated shipment volume.

[0016]

An allocation inventory information receiving means 8 receives the allocation inventory information from a production management system 22. An allocation means 9 generates, based on the information including the order-receiving for allocation and the delivery date answer, the allocation, the guarantee value for provisional order-receiving, and the delivery date answer.

[0017]

A storage means 10 of the provisional order-receiving guarantee value stores the guarantee value for delivery date (guarantee value for provisional order-receiving), which is allocated to the provisional order-receiving information generated from the customer's requirement information.

A storage means 11 of delivery date answer information stores the delivery date answer information for the customer.

[0018]

An output means 12 of delivery date answer information notifies the customer 21 of the delivery date information via the network.

An input means 13 of delivery date answer change requirement receives customer's requirement for delivery date change via the network of the customer 21.

[0019]

An output means 14 of shipment instruction information outputs the shipment instruction information, generated from



the delivery date answer information, to a distribution management system 23.

The customer 21 is the customer (distributors and agencies) purchasing the products, which is represented here as the terminal device for the customer 21 connected via the network.

[0020]

The production management system 22 manages the production and outputs the allocation inventory information based on the estimated shipment volume.

The distribution management system 23 is a system for distributing the products to the customer according to the shipment instruction information.

[0021]

Next, the operations performed in the constitution example shown in Fig. 1 are described, with reference to Fig. 2 to Fig. 6.

Fig. 2 is a flow chart (part 1) representing the operations performed in this invention. At step 1 shown in Fig. 2, the requirement information is entered from the customer 21.

Step 1 represents that the customer 21 shown in Fig. 1 enters his or her requirement information - for example, such as the requirement information (a) shown in Fig. 4 to be described later - into the processing unit 1.

[0022]

The provisional order-receiving information is generated at Step 2, wherein the provisional order-receiving information - for example, such as the provisional order-receiving information (b) shown in Fig. 4 - is generated based on the customer's requirement information entered at Step 1.

The order-receiving information for allocation is generated with the provisional order-receiving information at Step 3. In Step 3, the delivery date of which an allocation process for inventories has been made (guarantee value for a case of provisional order-receiving, or delivery date for a

case of formal order-receiving) is generated for the provisional order-receiving information generated at Step 2 (or an order-receiving information without linking, which is entered at Step 11 and is on a NO flow at Step 13). Then, the order-receiving information for allocation, which corresponds to the generated delivery date mentioned above, is generated. [0023]

The shipment volume of the product is totalized at Step 4, wherein the shipment volume to be shipped, as shown in Fig. 5 to be described later, is totalized. This means that the order-receiving information for allocation generated at Step 3 is collected and the estimated shipment volume of the product is generated.

[0024]

The allocation inventories information is received at Step 5, wherein the allocation inventories information is received from the production management system that will be shown in Fig. 5 later.

The allocation process to the order-receiving information is performed at Step 6, wherein the allocation inventories received at Step 5 is sequentially allocated to the estimated shipment volume generated at Step 4. For example, the sequential allocation process generates the delivery date information that will be shown in Fig. 5B to be described later.

[0025]

Output for the customer via an electronic medium is performed at Step 7. The output via the electronic medium is an example of notifying the customer of the allocation result generated at Step 6.

Transmitting the allocation result to the distribution management system is performed at Step 8, wherein the allocation result (the shipment instruction information) transmits to the distribution management system 23 shown in lower right of Fig. 1.

[0026]

The change requirement might be used by the customer at Step 9. When the customer 21 sends the change requirement information corresponding to the notification of the allocation result, the change requirement is received from the customer. According to the change requirement, the notified delivery date is modified, and a reallocation process is performed.

[0027]

As was stated above, the provisional order-receiving allocation is performed upon entering customer's requirement information, in response to the information, the delivery date answer as the shipment guarantee value is notified to the customer. When the formal order-receiving is subsequently made, the exact delivery date is given to the customer by allocating the applicable guarantee value as the formal order-receiving. It is also possible that, as it will be shown in Figs. 3A and 3B later, when the received formal order is within the guarantee value, the applicable guarantee value is allocated, and the formal delivery date answer according to the guarantee value is sent to the customer, while when the guarantee value is not sufficient for the received formal order, the portion short is allocated, as a newly received order, with processes of Step 11, Step 12, and Step 13 for providing the formal delivery date. As it will be described later in Fig. 3B, the applicable guarantee value is to be deleted on or after the deadline date which is calculated from the guarantee value, and the provisionally allocated guarantee value based on customer's requirement information is also automatically deleted. With the deleting mentioned above, products comprising unnecessary stock can be automatically eliminated from a production plan.

[0028]

Fig. 3 shows flow charts (part 2) representing the operation performed in this invention. The flow chart (a) shown in Fig. 3 represents an operation when the shipment guarantee value is allocated based on the formal order-receiving

information.

[0029]

At Step 21 of the flow cart (a) shown in Fig. 3, a customer with new order-receiving information, as well as a guarantee value answer for the delivery date the customer desired, is searched for. Finding the shipment guarantee value for the ordered products is performed at Step 22. This means that whether the guarantee value, which is an answer for the desired delivery date for the customer with the newly received order information, is found or not, is determined. YES at Step 22 represents the finding of the answer for the guarantee value, corresponding to the desired delivery time for the customer with new order-receiving information. Therefore, a further step is taken at Step 23. On the other hand, the allocation process comes to the end with NO at Step 22.

[0030]

At Step 23,  $(\text{guarantee value}) > (\text{number of received order})$  is determined. As a YES determination means the guarantee value is larger than the volume of received order, Step 24 follows. A substitution equation,  $(\text{guarantee value}) = (\text{guarantee value}) - (\text{number of received order})$ , at Step 24 means the determined guarantee value is updated by subtracting the number of received order from itself. Since updated guarantee value is applicable to the received order, it is allocated to the received order and the allocation process comes to the end. On the other hand, NO at Step 23 indicates that the guarantee value is smaller than the volume of received order, which leads to the deleting of the guarantee value and the provisional order-receiving information at Step 25. At the same time, the applicable guarantee value is allocated (a process following Step 11, Step 12, and YES result at Step 13 shown in Fig. 2), and a portion of the shortage of the guarantee value is allocated as the newly received order (a process following Step 11, Step 12, and NO result at step 13 Shown in Fig. 2).

[0031]

Thus, to the formal order-receiving information from the customer, the guarantee value is allocated if the volume of the received order is within the shipment guarantee value. If the guarantee value is not enough to cover the formal order-receiving information, the portion of shortage can be allocated as the newly received order. If the guarantee value is not available, the whole formal order-receiving information can be allocated as a newly received order.

[0032]

The flow chart (b) shown in Fig. 3 is a flow chart representing the operation in which the applicable guarantee value is automatically deleted on or after the deadline date calculated from the guarantee value.

In the flow chart (b) shown in Fig. 3, at Step 31, the order-receiving deadline date, before which a shipment is available, is calculated from the delivery date indicated in the provisional order-receiving information. As shown on the right side in Fig. 3, the possible deadline date, corresponding to the delivery date indicated in customer's provisional order-receiving information (the shipment guarantee value), is calculated by subtracting shipment lead time from desired shipment date.

[0033]

At Step 32, a given date is compared to the deadline date calculated according to the provisional order-receiving information. At Step 33, (the order-receiving deadline date) > (a given date), is determined. A YES determination indicates that the date of the guarantee value has not arrived at the date to be deleted, and Step 35 follows. On the other hand, a NO determination indicates that a given day coincides with the deadline date. Then the guarantee value and the provisional order-receiving information are deleted at Step 34 to avoid starting production without having formally received an order, and Step 35 follows.

[0034]

At Step 35, whether all provisional order-receiving information has been processed is determined. A YES determination leads to the end of the flow. Moreover, when the determination is NO, the operation is returned to Step 31, where the loop process starts again.

Thus following operation become possible: wherein, calculating the order-receiving deadline date from the guarantee value, automatically deleting the guarantee value (and the provisional order-receiving information) on or after the order-receiving deadline date, so that, as to the generated provisional order-receiving information based on customer's requirement information and the guarantee value allocated to it, an unallocated value (a guarantee value to which no formal order allocated) is automatically deleted on or after the deadline date to avoid unnecessary stocking caused by the guarantee value to which no formal order is allocated.

[0035]

Fig. 4 and Fig. 5 are graphical representations for this invention.

An example (a) in Fig. 4 shows an example of the requirement information from the customer by table form. This table represents the customer's requirement information entered at Step 1 described in Fig. 2 before. The following each information items are corresponded to each customer.

[0036]

- customer's name (customer's ID):
- article:
- required weeks:
- volume:
- other specifications:

Herein, information of each customer, indicating which article and what amount will be needed at which week (requirement information), is arranged. According to information indicated in the example, the provisional order-receiving information for each customer is generated.

[0037]

An example (b) in Fig. 4 shows another example of the provisional order-receiving information made up from the requirement information in table form. It is made up as the provisional order-receiving information, which meets conditions concerning article, week, and volume required by each customer's requirement information in the table. The made-up information is recorded as shown in the example, and corresponds to the information below.

[0038]

- regular customer's name (customer's name):
- provisional order number:
- specification number:
- article: desired shipment day
- the number of provisional order receiving:
- other specifications:

The regular customer's name is the customer's name shown in Fig. 4. The provisional order number is a number given to the corresponding provisional order-receiving. The specification number is a number given to each article recorded in the corresponding provisional order-receiving information. The article is the article described in Fig. 4. The desired shipment date represents the required week described in Fig. 4. The number of provisional order-receiving represents the required volume (volume) described in Fig. 4. As described above, making up of the provisional order-receiving information, which meets customer's requirement information described in Fig. 4, makes it possible that a provisional order-receiving of each customer is accepted, and an applicable guarantee value is allocated to the provisional order-receiving and given to the customer as the delivery date.

[0039]

An example (c) shown in Fig. 4 is a graphical example representing the delivery date answer (shipment guarantee value) for the provisional order-receiving information. The

delivery date answer mentioned above is a result (guarantee value), which is produced after the allocation process of allocation inventories for the provisional order-receiving information (b) described in Fig. 4 is over, wherein an information indicated below is further added to the provisional order-receiving information (b) described in Fig. 4, and is registered.

[0040]

- Shipment guarantee value (delivery date answer):

The guarantee value described here is the delivery date answer (guarantee delivery date answer), which guarantees the delivery date for the provisional order-receiving information. In other words, it is the guarantee delivery date answer guarantee that the applicable guarantee value is to be allocated without fail when the formal order-receiving occurs (refer to the flow chart (a) shown in Fig. 3).

[0041]

An example (d) shown in Fig. 4 represents the formal order-receiving information after a presentation of the requirement information by table form. After the guarantee value shown in Fig. 4 is given to the customer as an answer, the received order within the applicable guarantee value is securely allocated as the formal order-receiving once the order is formally received. The portion of the formal order that surpasses the guarantee value is allocated as a newly received order (refer to the flow chart (a) shown in Fig. 3). According to the given process, the formal order-receiving information corresponds to the items described below, and is registered.

[0042]

- regular customer (customer's name):
- order number:
- specification number:
- article:
- desired shipment date:
- the number of order-receiving:



- other specifications:

An example (e) shown in Fig. 5 represents the estimated shipment volume by table form. The guarantee value is allocated based on the formal order-receiving information (d) shown in Fig. 4, and the portion of the shortage is allocated as the newly received order. The article, desired shipment date, and volume shown in the Figure are all totalized according to the allocations described above. In the table, the estimated shipment volume is arranged by calculating the corresponding information shown below.

[0043]

- article:
- estimated weekly shipment volume:
- other specifications:

As shown in the Figure, the volume of the article is totalized and arranged on a weekly basis (this week, next week, second week ---) so that the weekly shipment volume of each article for all customers is totalized.

[0044]

An example (f) shown in Fig. 5 shows an example representing the allocation material by table form. As the shipment totalization result shown in the example (e) of Fig. 5 is notified to the production management system, the system receives the information of the inventories (allocation inventories), which can be produced in the production management system to be allocated. In the Figure, the allocation inventories information is arranged in correspondence with the items described below.

[0045]

- present stock:
- article:
- expected stock volume:
  - one week later:
  - two weeks later:
  - three weeks later:

The allocation inventories information shown in the Figure gives information showing the stock of each article and the expected production volume on one week ahead, two weeks ahead, three week ahead --- (expected production information).

[0046]

An example (g) shown in Fig. 5 represents the delivery date information by table form, that is to say, an example of the delivery date which is allocated, according to the allocation inventories (f) shown in Fig. 5, to each customer's formal order-receiving information. The delivery date information shown in the Figure arranged here corresponds to the information described below.

[0047]

- customer's name:
- article:
- classification: order-receiving requirement
- delivery date:
- volume:
- allocation result:
  - week:
  - volume:
- other specifications:

The delivery date information shown in Figure is to be notified, as the delivery date answer, to each customer.

[0048]

Fig. 6 is a graphical representation showing general concept of this invention. The customer 21 and the processing unit 1 (our company) represent the customer 21 and the processing unit 1 shown in Figs. 1, respectively. First, at Step 41, the customer issues the requirement information.

[0049]

At Step 42, the requirement information issued from the customer at Step 41 is transmitted to (entered into) the unit 1 (our company) through the network.

At Step 43, the requirement information entered at Step 42

is managed.

[0050]

At Step 44, the provisional order-receiving information is generated. At this step, the provisional order-receiving information (b) described in Fig. 4 is generated.

At Step 45, the provisional order-receiving allocation is performed. At this step, the provisional allocation (c) described in Fig. 4 is performed and the shipment guarantee value is produced.

[0051]

At Step 45', a required production volume is totalized, as the provisional order-receiving allocation is performed, and is notified to the production management system.

At Step 46, the delivery date (guarantee value) in response to the requirement information is provided to the customer.

[0052]

At Step 47, the customer issues the formal order.

At Step 48, the order-issuing information is notified to the unit 1 (our company) through the network.

[0053]

At Step 49, an order-receiving management is performed for the order-issuing information notified at Step 48.

At Step 51, the order-issuing change requirement is issued by the customer.

At Step 52, the order-issuing change requirement is notified to (entered into) the processing unit 1 (our company). This notification is received and managed in the order-receiving management.

[0054]

At Step 53, according to the order-issuing change requirement, remained order information is generated, wherein the information of a remained order is generated under the order-receiving management at Step 49.

At Step 54, the order-receiving allocation is performed.

Based on the allocation inventories, the allocation for order-receiving is performed according to the remained order information.

[0055]

At Step 55, a NG allocation is notified to the customer if the NG allocation (allocation impossible, or delayed allocation for the delivery date) has resulted from the allocation performed at Step 54.

At Step 56, the customer confirms the NG allocation notified at Step 55.

[0056]

At Step 57, an OK allocation (success of an allocation coincides with customer-desired delivery date) results from the allocation performed at Step 54.

At Step 58, the processing unit 1 (our company) receives the OK confirmation information from the customer, which confirms the allocation at Step 56.

[0057]

At Step 59, the shipment management processing is performed according to the OK allocation information at Step 57 and the OK confirmation information from the customer at Step 58.

At Step 59', with the shipment management processing at Step 59, the shipment instruction information is notified to the distribution management system 23.

[0058]

At Step 60, the processing unit 1 (our company) receives the NG confirmation information from the customer.

At Step 61, for the received information, an allocation confirmation response is made. At Step 62, the allocation change information is generated, the order-receiving allocation of Step 54 is performed, and at Step 63, the NG response is notified to the customer.

[0059]

Therefore, the following steps become possible; generating

the provisional order-receiving information ((b) in Fig. 4) based on customer's requirement information ((a) in Fig. 4), which is followed by the provisional allocation for providing the required delivery date (guarantee value (c) shown in Fig. 4), allocating the required delivery date (shipment guarantee value) to the formal order upon receiving formal order while the guarantee value shortage is allocated as new order-receiving, replying an OK allocation / NG allocation to the customer for confirming by which method the shipment management is made, and notifying the shipment instruction information to the distribution management system 23 to ship the product.  
[0060]

[Effect of the Invention]

As described heretofore, this invention has a constitution, wherein; the delivery date answer (shipment guarantee value) is presented for customer's requirement information, and, according to such delivery date answer (shipment guarantee value), the automatic allocation is performed upon receiving a formal order while a guarantee value unavailable for the formal order-receiving is deleted. Thus it is possible to improve customer service and to promote sales activities by notifying the delivery date answer (shipment guarantee value) for customer's requirement information.

[Brief Description of the Drawings]

[Fig. 1] A diagram showing one configuration example of the present invention.

[Fig. 2] A flow chart (part 1) for explaining an operation of the present invention.

[Fig. 3] Flow charts (part 2) for explaining an operation of the present invention.

[Fig. 4] A graphical representation of the present invention (part 1).

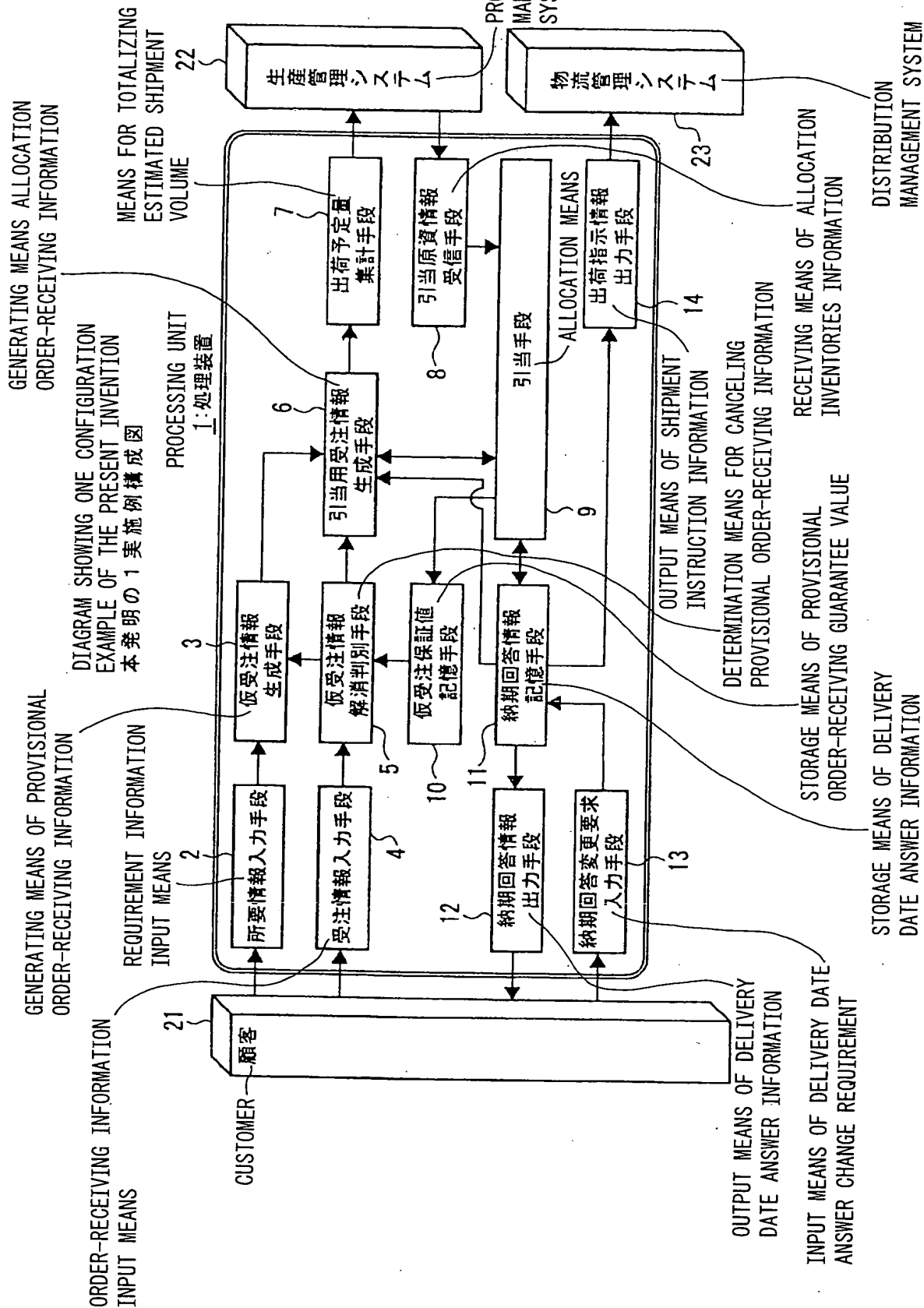
[Fig. 5] A graphical representation of the present invention (part 2).

[Fig. 6] A graphical representation showing an outline of

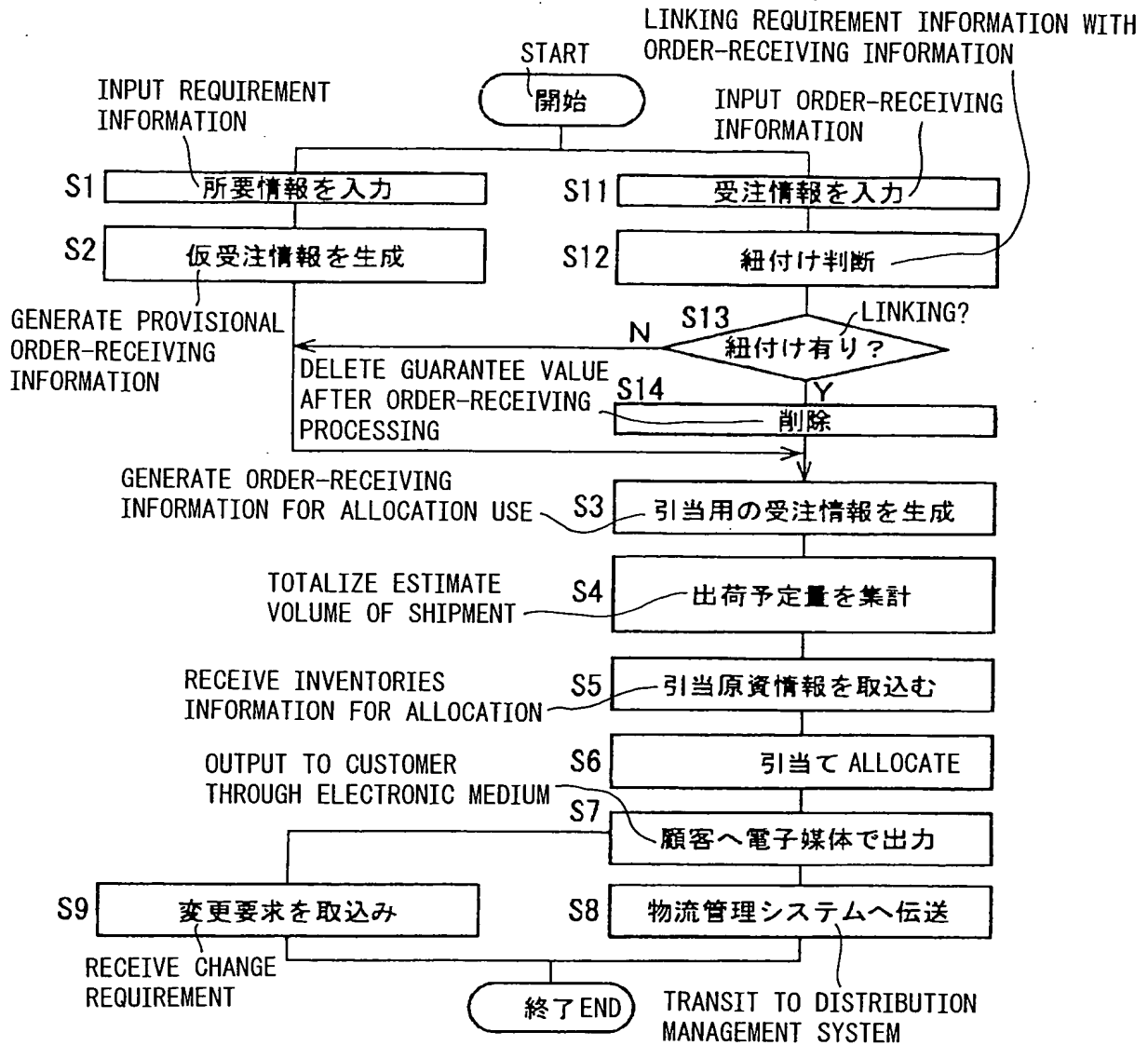
the present invention.

[Description of Reference Numbers]

- 1: processing unit
- 2: requirement information input means
- 3: generating means of provisional order-receiving information
- 4: order-receiving information input means
- 5: determination means for canceling provisional order-receiving information
- 6: generating means allocation order-receiving information
- 7: means for totalizing estimated shipment volume
- 8: receiving means of allocation inventories information
- 9: allocation means
- 10: storage means of provisional order-receiving guarantee value
- 11: storage means of delivery date answer information
- 12: output means of delivery date answer information
- 13: input means of delivery date answer change requirement
- 14: output means of shipment instruction information
- 21: customer
- 22: production management system
- 23: distribution management system



FLOW CHART (PART 1) FOR EXPLAINING AN OPERATION OF THE PRESENT INVENTION  
 本発明の動作説明フローチャート(その1)

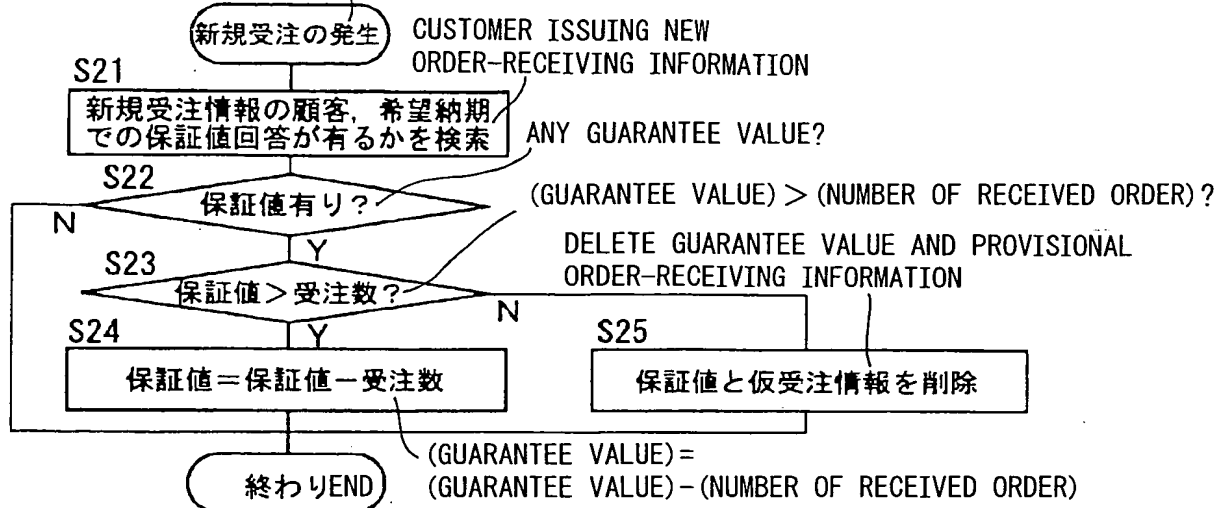




## FLOW CHARTS (PART 2) FOR EXPLAINING AN OPERATION OF THE PRESENT INVENTION

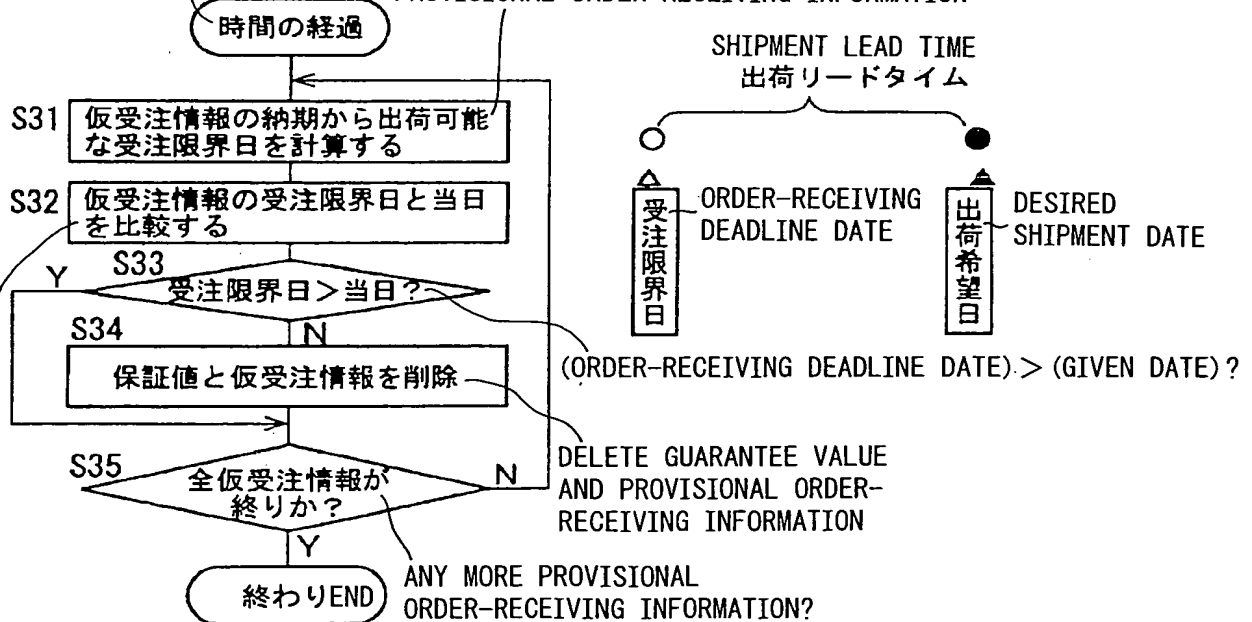
## 本発明の動作説明フローチャート(その2)

## (a) NEWLY RECEIVED ORDER



## TIME PASSAGE (b)

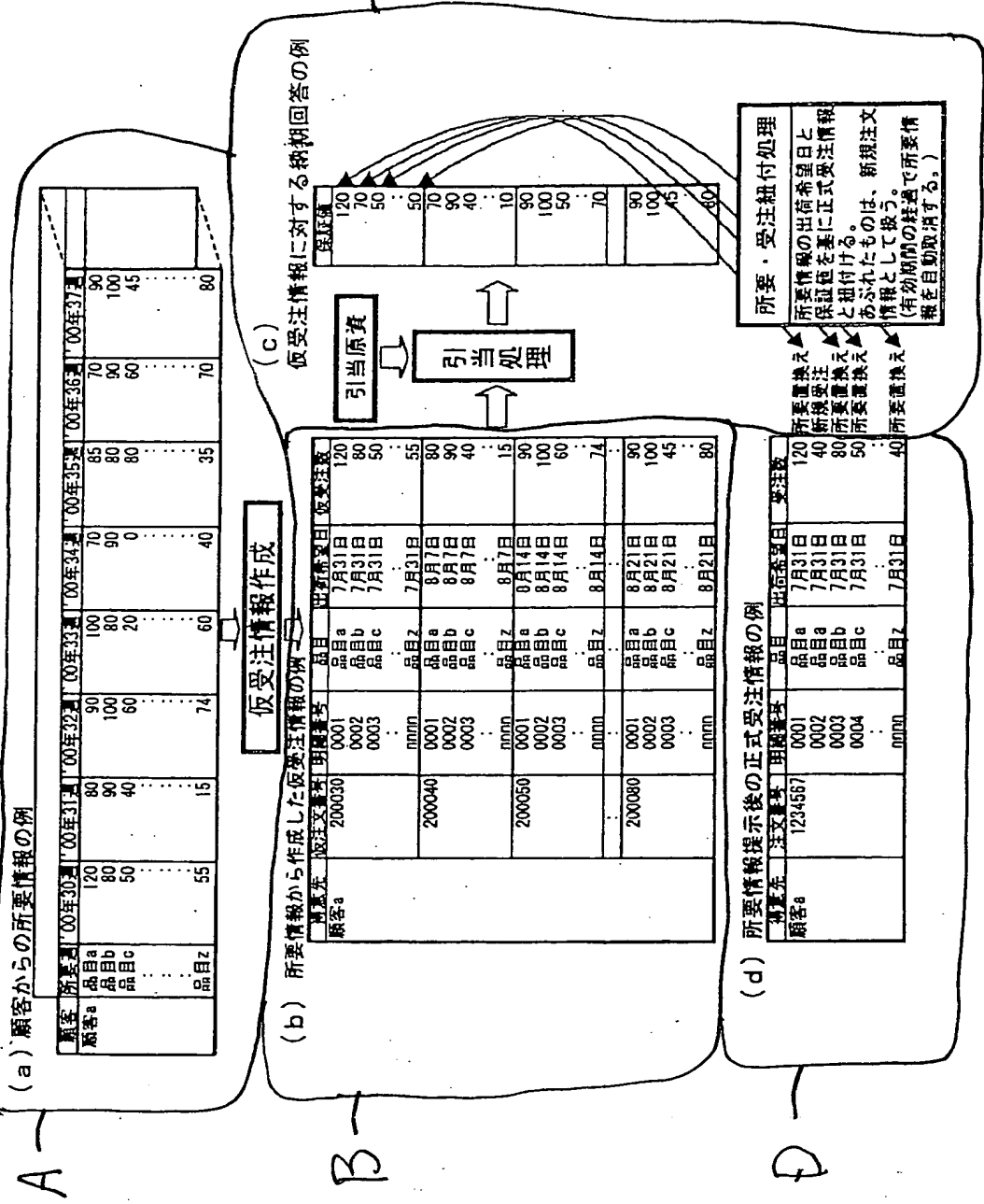
CALCULATE ORDER-RECEIVING DEADLINE DATE TO SHIPMENT FROM DELIVERY DATE OF PROVISIONAL ORDER-RECEIVING INFORMATION



COMPARE BETWEEN ORDER-RECEIVING DATE FOR PROVISIONAL ORDER-RECEIVING INFORMATION AND GIVEN DATE

【図 4】  
[FIG. 4]

GRAPHICAL REPRESENTATION OF THE PRESENT INVENTION (PART 1)  
本発明の説明図(その1)



A

(a) EXAMPLE OF REQUIREMENT INFORMATION FROM CUSTOMER

CUSTOMER	ARTICLE	00 YEAR 30 WEEK	00 YEAR 31 WEEK	00 YEAR 32 WEEK	00 YEAR 33 WEEK	00 YEAR 34 WEEK	00 YEAR 35 WEEK	00 YEAR 36 WEEK	00 YEAR 37 WEEK	
CUSTOMER a	ARTICLE a	120	80	90	100	70	85	70	90	
	ARTICLE b	80	90	100	80	90	80	90	100	
	ARTICLE c	50	40	60	20	0	80	60	45	
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
	ARTICLE z	55	15	74	60	40	35	70	80	

A

GENERATE PROVISIONAL  
ORDER-RECEIVING INFORMATION

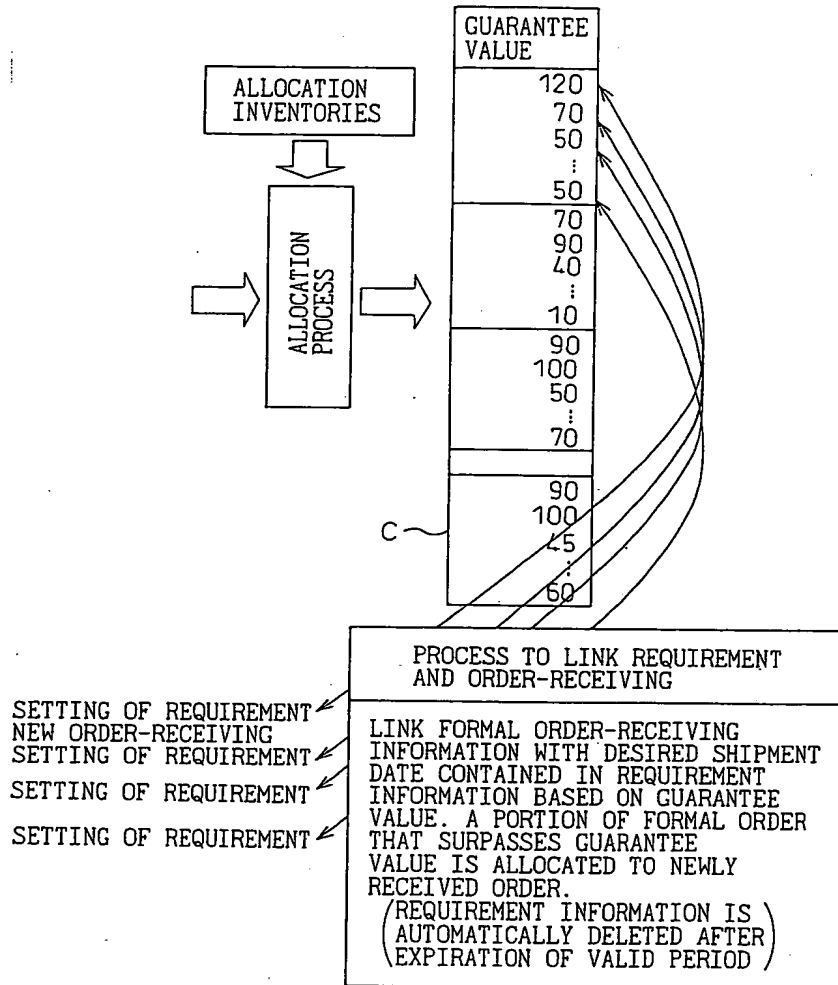
B

(b) EXAMPLE OF PROVISIONAL ORDER-RECEIVING INFORMATION  
GENERATED FROM REQUIREMENT INFORMATION

REGULAR CUSTOMER	PROVISIONAL ORDER NUMBER	SPECIFICATION NUMBER	ARTICLE	DESIRED SHIPMENT DATE	NUMBER OF PROVISIONAL ORDER- RECEIVING
CUSTOMER a	200030	0001	ARTICLE a	JULY, 31	120
		0002	ARTICLE b	JULY, 31	80
		0003	ARTICLE c	JULY, 31	50
		⋮	⋮	⋮	⋮
		nnnn	ARTICLE z	JULY, 31	55
	200040	0001	ARTICLE a	AUGUST, 7	80
		0002	ARTICLE b	AUGUST, 7	90
		0003	ARTICLE c	AUGUST, 7	40
		⋮	⋮	⋮	⋮
		nnnn	ARTICLE z	AUGUST, 7	15
	200050	0001	ARTICLE a	AUGUST, 14	90
		0002	ARTICLE b	AUGUST, 14	100
		0003	ARTICLE c	AUGUST, 14	60
		⋮	⋮	⋮	⋮
		nnnn	ARTICLE z	AUGUST, 14	74
	⋮	⋮	⋮	⋮	⋮
	200080	0001	ARTICLE a	AUGUST, 21	90
		0002	ARTICLE b	AUGUST, 21	100
		0003	ARTICLE c	AUGUST, 21	45
		⋮	⋮	⋮	⋮
		nnnn	ARTICLE z	AUGUST, 21	80

C

(c) EXAMPLE OF DELIVERY DATE ANSWER FOR PROVISIONAL ORDER-RECEIVING INFORMATION



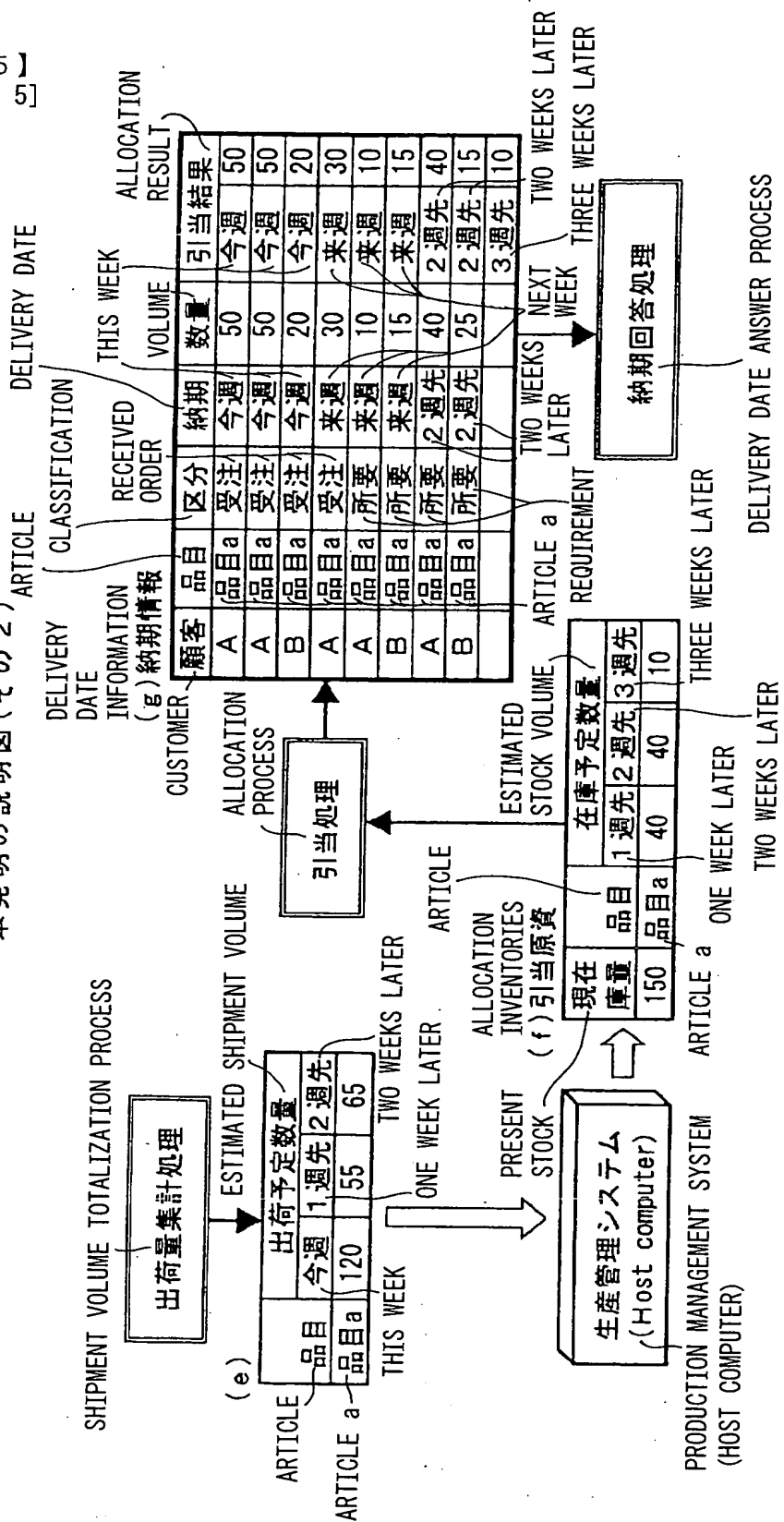
D

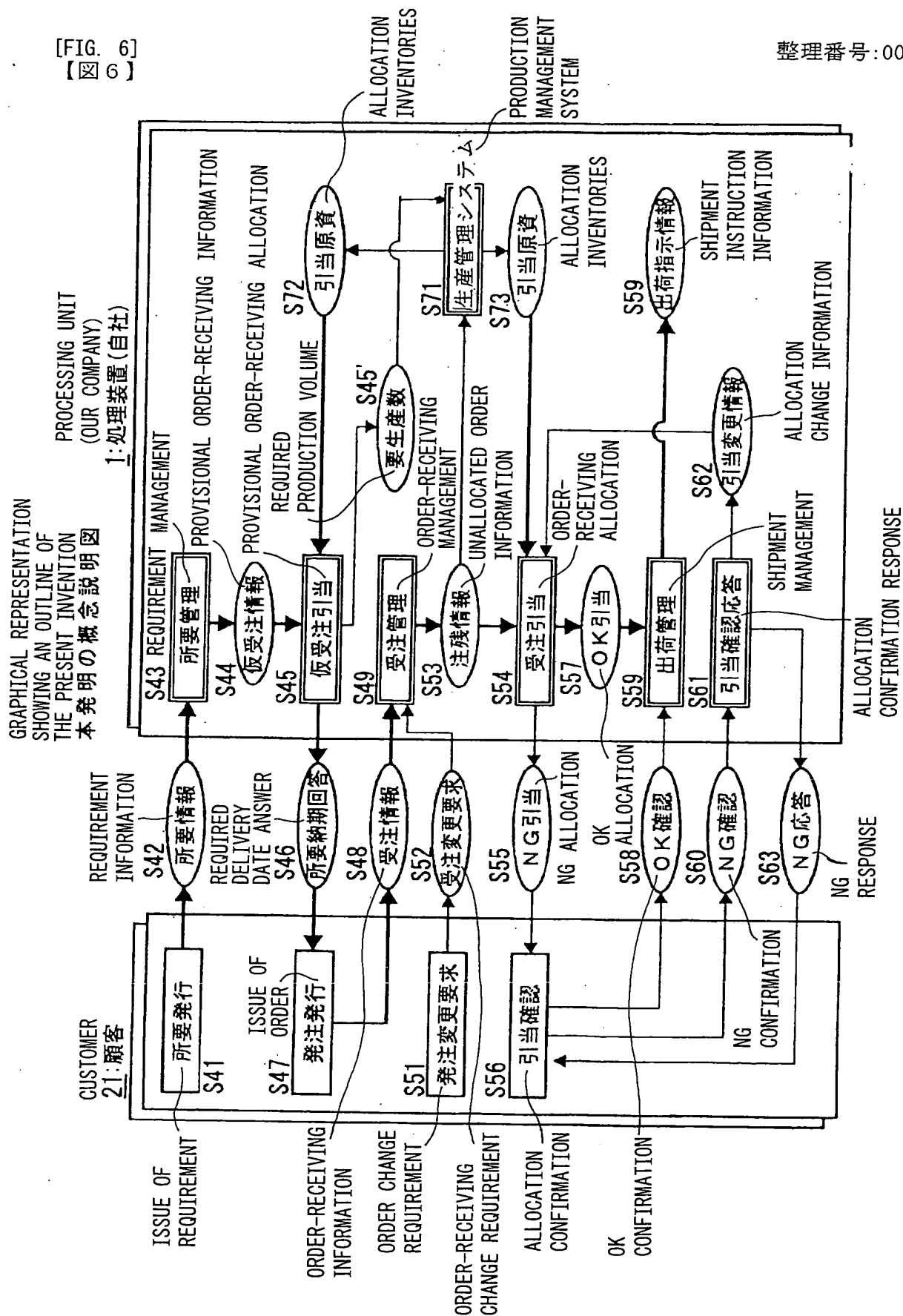
(d) EXAMPLE OF FORMAL ORDER-RECEIVING INFORMATION AFTER PRESENTATION OF REQUIREMENT INFORMATION

REGULAR CUSTOMER	ORDER NUMBER	SPECIFICATION NUMBER	ARTICLE	DESIRED SHIPMENT DATE	NUMBER OF RECEIVED ORDER
CUSTOMER a	1234567	0001	ARTICLE a	JULY, 31	120
		0002	ARTICLE a	JULY, 31	40
		0003	ARTICLE b	JULY, 31	80
		0004	ARTICLE c	JULY, 31	50
		...	...	...	...
		nnnn	ARTICLE z	JULY, 31	40

【図 5】  
[FIG. 5]

GRAPHICAL REPRESENTATION OF THE PRESENT INVENTION (PART 2)  
本発明の説明図(その2)





[Document Name] Abstract

[Abstract]

[Object] The purpose of the present invention is to improve customer service and to promote sales activities by notification of a delivery date ( guarantee value ) for customer's requirement information, by presenting a delivery date ( guarantee value ) for a requirement information from a customer, and making an automatic allocation according to such a delivery date ( guarantee value ) upon receiving a formal order while automatically erasing the guarantee value that is not available for the formal order.

[Means for Solution] A method of the invention include the steps of; entering the requirement information of a product from the customer; supplying the customer with a provisionally allocated shipment guarantee value for the above entered requirement information; receiving a formal order-receiving information of the product from the customer; and formally allocating an applicable said guarantee value to the above-received formal order-receiving information.

[Selected Drawing] Fig. 1